

Simpkins

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Hobbies

WEEKLY

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A WEST COUNTRY CORACLE

MOST people know that the Ancient Britons used coracles, but not so many are aware that these light craft are still used today, chiefly by fishermen on the Severn and Wye, and also in Clare, Ireland, where they are known as Currachs. They are light and strong, besides being cheap and easy to make, and for these reasons modern handymen may care to make one.

A Useful Craft

For fishing, duck shooting, ferrying purposes and general 'exploration' work they have advantages over larger craft whilst in shallow, safe waters, the coracle makes an ideal plaything for an active young person. A home-made coracle is much more fun and certainly cheaper than an ex-R.A.F. float. The expert can handle the coracle in rough water, but readers are cautioned against taking such a craft on the open sea or on rivers with tricky currents.

In shape, the coracle is rather like half a pear, and consists of a wooden, basket-like framework, covered with tarred canvas, and measuring approximately 4ft. by 3ft., holding one person only. The coracle is propelled by sculling with an oar over the more rounded end.

With or Without Rowlock

In the present model the bracket holding the rowlock is a comparatively luxurious refinement. It is optional whether this is made for it is possible to do without it, but since it makes

sculling easier for amateurs, its use is recommended.

The best wood to use is ash, 1½ins. wide and ½in. or a little more thick, or as near to this as you can get. You will require:

- 8 pieces 8ft. long (horizontal strips in the plan).
- 8 pieces 9ft. long (vertical strips in the plan).
- 2 pieces 10ft. long (diagonal bracing strips).
- 2 pieces 18ft. long (inner and outer rims).

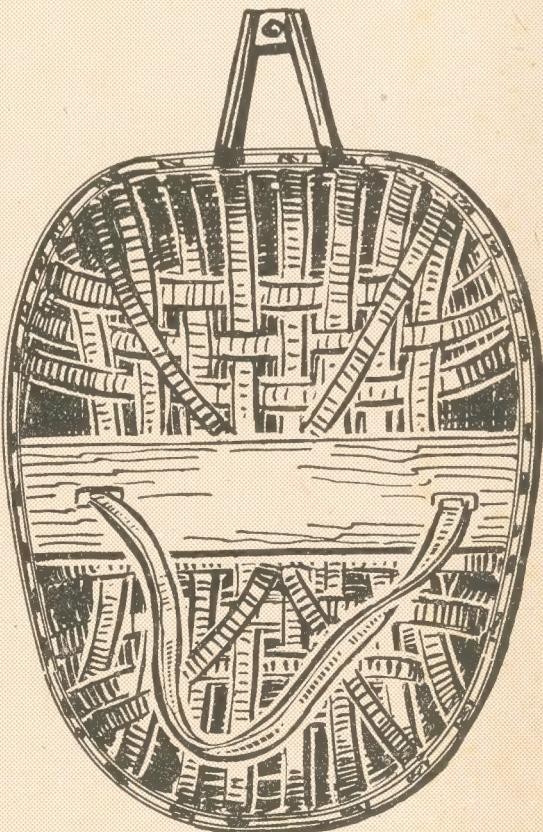
In the last-named it may not be possible to get so long a strip in one piece, consequently two strips will have to be joined.

The strips should be well steamed in a steam chest if you have one, or else soaked in water for a week to make them pliable. The two sets of eight strips are then taken and woven through each other, as clearly seen in the drawing. The ends of the ribs are then curved upwards.

The easiest way is to curve up the two ends of one strip and tie the ends across with a cord, which may be adjusted as required.

Copper Nails

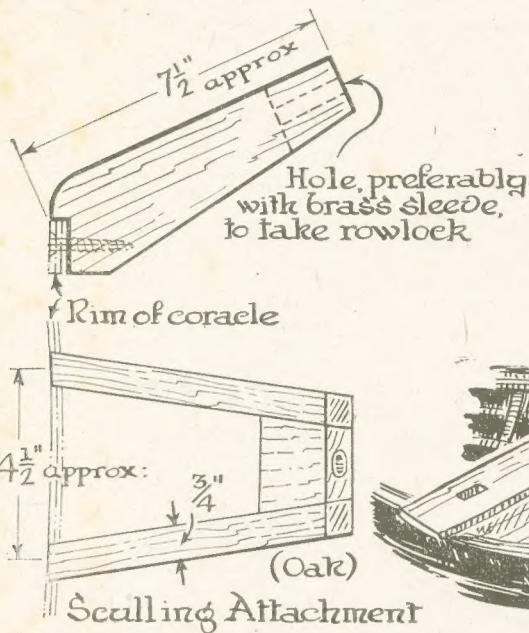
When the whole 16 cords have thus been fixed, and the diagonal braces fitted, the inner and outer rims may be applied. Copper or galvanized nails are driven through both rims and ribs and clenched



over. (Ordinary nails would rust away in a few weeks). Nails may also be driven through various crossings of the ribs, taking care not to split the wood.

The sizes given for the lengths of strips are on the generous side, so the ribs can stick up about 4ins. to 6ins. above the rim and be cut off afterwards making a neat job. The drawing on the right is rather diagrammatic. The strips, when bent, look more like the picture on the previous page.

To be historically accurate, you would have to cover the framework with



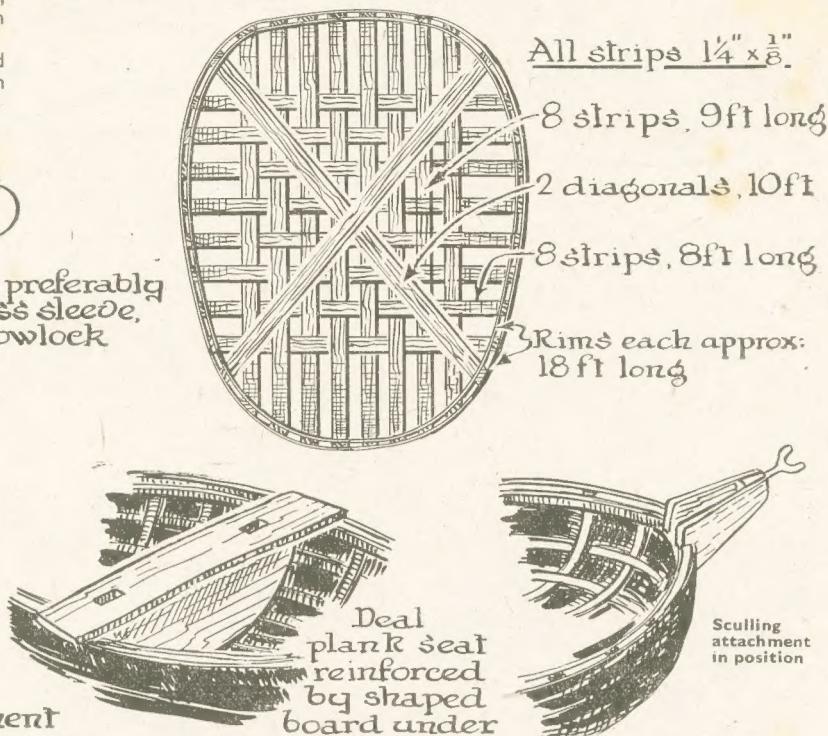
animal hide. Canvas, however, is quite useful, or a piece of rough tarpaulin. For economy, however, an old tent, etc., may be utilised. Give the framework a coat of tar, and then, when dry, apply the canvas, tacking it well at the top, and pleating neatly where necessary.

Give the canvas a coat of tar, so the whole coracle is waterproof. If tar is considered too messy, paint can be used, several coats being required.

The seat is a plank of deal screwed to the framework at its widest part. Underneath, at right angles to it, is a curved board. This reinforces both the seat and the framework. In the seat

brass screws) to the rim at the front of the semi-circular end, about 4½ ins. apart, and converging inwards. At the end a block is fixed. This is drilled with a hole to take a single rowlock, and will wear better if provided with a brass sleeve.

When next visiting a boathouse, one should enquire if they have a spare



two slots are cut, to take a broad strap to carry the coracle on ones back, just like a snail with its shell.

Finally make the sculling attachment. First take two pieces of oak about 7½ ins. long and ¾ in. thick, and shape them as shown. They are firmly screwed (with

rowlock and a secondhand light oar or paddle to dispose of. The paddle is pulled from side to side, and canted over at every turn. It is difficult to explain this in print, but experience or, preferably, a practical demonstration from an expert, will soon show how.

Craftsman's Notes—

Islands for Sale

SUCH books as 'Swiss Family Robinson' and 'Coral Island' must have enthused many a young reader with the idea of life on an island. For many not the least attractive feature of the adventure would be the opportunities for using their skill in making the place habitable with whatever tools and materials were available, while others would fancy the possibilities of exploring and studying natural history.

For most of us, enthusiasm for such a novel mode of life soon wears off, preferring to pursue our handicrafts and hobbies in more orthodox surroundings. But any who still fancy island life, and quite a number do, can sometimes buy or rent an island for themselves around our own coast. During recent months I have noticed the 160-acre Channel Acre Brechou for sale, and holdings to let on Stroma island in the Pentland Firth.

Islands of various sorts and sizes occasionally come on the market in this way. On some there are other people to share one's company, like Stroma, with about 100 inhabitants and one church, one school, one shop, and a lighthouse. Others, although so near our mainland, are yet so isolated that an occupier would have a real Robinson Crusoe existence.

* * *

Preparations for Painting

E-PAINTING shabby woodwork is one of the home decorating jobs which amateurs often like to do themselves, but eagerness to get busy with the brush should not tempt one to skip the essential though rather more tedious preliminaries. A good clean foundation for the new paint makes all the difference to the finished job.

A blowlamp and scraper are desirable to deal with really shabby work, though amateurs may not wish the extra

expense of these unless there is a good deal to do or the surface is extra bad. They will probably find it sufficient to wash the old paintwork thoroughly, using hot water and plenty of energy.

Add a handful of soda to the bucket of water, and, if possible, use some soap on the brush as well. If there are any particularly greasy patches, a rag moistened with turpentine is helpful. After washing, wipe over with a clean damp cloth, then when dry, rub smooth with glasspaper, dust down, and there will be a good base on which the new paint will take well and dry well.

The quantity of paint required depends so much on the condition of the wood that amateurs will find it convenient to start off with a small quantity to see how far it goes. A pound may cover something like fifty square feet, but this is only a very rough idea, as rough wood takes more paint than smooth, and first coats more than later ones.

How the radio amateur can build an economy PERSONAL PORTABLE TWO

MANY midget loudspeaker portables employ three or four valves, the latter usually in a superhet circuit. But experiment shows that two valves are ample to provide loudspeaker results from the two or three stations normally best received in any particular area, provided frame-aerial and other circuit details are efficiently arranged.

This results in a very considerable reduction in first cost of the components compared with a 3-valve or superhet receiver, and the life of the batteries is almost doubled. In addition, complications in construction are avoided.

Results Obtained

Used in various Midland localities, the set provides good speaker results from Midland, Light, and 3rd Programmes. Other stations are also receivable, giving fair speaker results. This is with the internal frame-aerial, and though a short external aerial would, naturally, increase volume, such has not at any time been thought necessary. In many areas long waves are worthwhile and the frame-aerial covers these in addition to the usual medium wave band.

A pentode detector is used, followed by a tetrode output valve, and two or three points must be noted if maximum results are to be obtained.

The frame-aerial should be wound as will be explained, as it will be found that

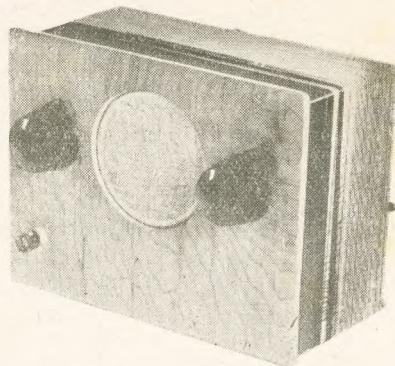
using pile windings, or windings where the turns are closely together, will result in a noticeable reduction in signal pick-up.

Secondly, the coupling transformer between the valves should be a good-quality full-sized component with a ratio of about 1:5. Various midget transformers were tried here and each caused a most noticeable reduction in volume through their inability to provide sufficient primary impedance for the pentode detector. In fact the reduction in volume with some small transformers proved so severe, resistance-capacity coupling was preferable.

Finally, the midget speaker and output transformer should be obtained together from the same manufacturer or supplier, and the latter should be suitable for a midget output pentode. Otherwise serious mis-matching in either the primary or secondary circuit of the transformer may arise.

Case Construction

The panel is cut from 3-ply to the dimensions shown in Fig. 4. As illustrated in Figs. 2 and 5, the aerial is wound on a box-shaped frame screwed to the pane, but slightly smaller. Four pieces of 3-ply $3\frac{1}{4}$ ins. deep are required here. Top and bottom pieces are $6\frac{1}{2}$ ins. long and each side is $4\frac{1}{2}$ ins. long. The pieces fit as in Fig. 5. The whole should be rigid, and the corners of the frame should be bevelled.



Photograph of the Author's Set
approximately the diameter of the wire.

All other sections are close-wound and to assure adequate long wave reaction the 22 turn section of the reaction winding should be as close the 80 turn long wave section as possible. To facilitate wiring up, the ends of the windings are numbered to agree with Figs. 1 and 3.

When the frame-aerial is complete a long strip of brown paper is wound tightly round it so that turns are not moved when the set is pushed in a suitable case, the internal size of which will just give clearance to the aerial.

Wiring of the Receiver

Fig. 3 shows all connections. The intervalve transformer is mounted on the side of the frame upon which the aerial is wound (see Fig. 5). Fig. 3 is a 'flattened' diagram and normally the transformer will be immediately behind the reaction condenser, as shown in Fig. 5.

The valveholders are fixed to a piece of thin wood or metal about $\frac{1}{8}$ in. by $1\frac{1}{2}$ ins. and this is held immediately below the tuning condenser by brackets, as also illustrated in Fig. 5. In Fig. 3 the valveholders are shown moved down below the panel so that connections can be indicated.

The switch will need to be a small type if maximum space is to be left available for the batteries. In the first position the set is off; in the second position, the L.T. negative circuit is completed and the set is on; in the third position the set is also on and the frame-aerial switched to medium waves.

Insulated leads should be used throughout. All parts are positioned as shown in Fig. 3, with the exception of the holders and transformer mentioned, which are placed as in Fig. 5.

The speaker will need to be fixed by

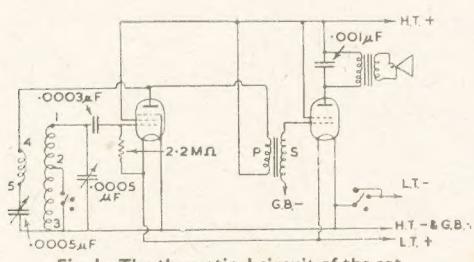


Fig. 1—The theoretical circuit of the set

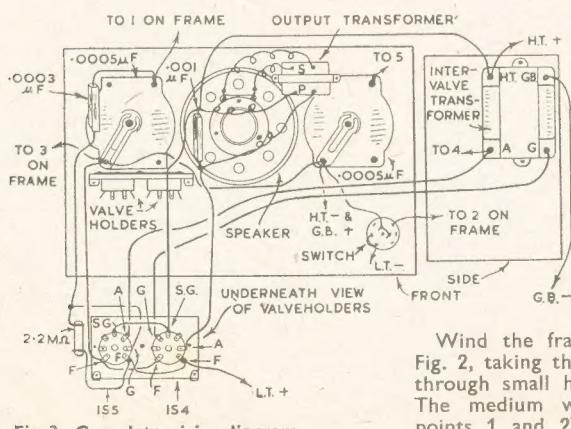


Fig. 3—Complete wiring diagram

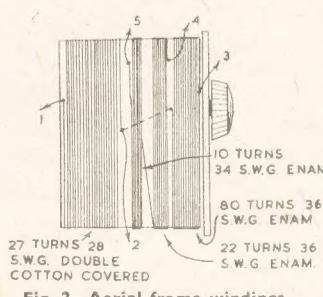


Fig. 2—Aerial frame windings

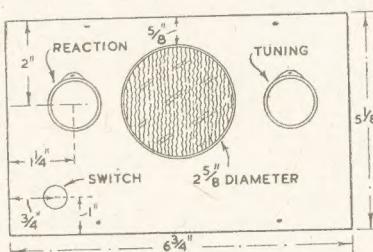


Fig. 4—Dimensions of front of receiver

Wind the frame-aerial as shown in Fig. 2, taking the ends of the windings through small holes into the interior. The medium wave section (between points 1 and 2) has turns spaced by

using three small screws and washers, fine gauze having been stretched over the panel hole.

Operating Notes

A 1.5 volt dry cell is used for L.T. and the consumption is .15 amp. For H.T., 45 or more volts should be used, and the Grid Bias will need to be between 3 and 6 volts, depending upon the voltage of the H.T. battery. The maximum screen voltage of the 1S4 is 67.5, the maximum output being .18 watts with this voltage also applied to the anode. If a midget 90 volt battery is used this should be remembered and the screen taken to a separate lead and appropriate battery tapping.

Tuning is quite critical and reaction should be used carefully, though on near stations it does not need to be employed excessively. If necessary, the set should be turned one way or the other as stations in line with the axis of the frame windings will not be heard.

Component Details

As a further guide to the constructor, the components used can now be dealt

with a little more fully. The valves are of the midget button-base type, a 1SS being used for detection, with a 1S4 as output. The positions of the valves will be seen from the diagrams.

For these valves midget button-base holders are used, and, as will be seen, some of the tags are unused. These tags

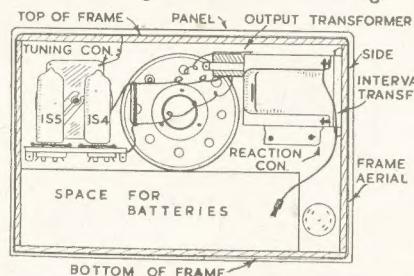


Fig. 5—The back spacing and fitting

must not touch any wiring because the valve pins which fit in them pass into the valves themselves and are used to support the electrodes inside, even when not used for connections. Do not insert the valves in the wrong holders,

and do not connect the batteries until the valves are in position. (If this point is not observed, the filaments may be burnt out if the pins are accidentally touched on the wrong sockets when inserting the valves).

Two small solid-dielectric variable condensers are used for reaction and tuning, and these should be fitted with fairly large knobs with pointers.

Various permanent-magnet moving coil speakers are obtainable, but as the speech-coil impedance is not standardised, the speaker transformer should be obtained with the speaker, as mentioned.

The receiver, made up as described, will fit completely inside the well-known war-time civilian gas-mask box, and a disused gas-mask carrier will prove ideal for it.

Great care should be taken to assure that no battery or other leads short circuit to each other, or to other parts, or valves or other components may be damaged. Sound insulation is, therefore recommended.

Add to the life and usefulness in your POCKET KNIFE CARE AND USAGE

BOYS of all ages are never really happy until they are in possession of a pocket knife. Many, however, get quickly tired of the knife, because in the first place there is lack of care with it, and secondly, it is used in a rough and ready way. Here are some points of caring for it properly.

If the knife is used to cut an apple or anything juicy, remember to carefully wipe the blade dry, or it will quickly become rusted. Remember a pocket knife is not a chisel; the blade should

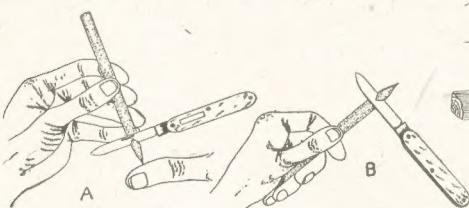


Fig. 1—Sharpening a pencil—wrong and right

not be knocked with a hammer when working on a piece of wood.

How Accidents Happen

Care should also be taken when using your pocket knife, since it is quite an easy matter to cut your fingers. As an example, in sharpening a pencil, the following hint will prevent cutting your thumb. In Fig. 1 (A) is shown a common method of sharpening a pencil which can easily result in a cut thumb. The pencil point rests on the thumb as indicated, and the knife is shown cutting the wood towards the thumb. Any slip of the knife if a pencil is sharpened in this manner will result in a cut.

Try sharpening in the manner indi-

cated in view Fig. 1 (B) with the knife blade working in a direction away from your thumb or fingers. You will by this method also get a much better point on your pencil.

Right and Wrong

Another example in the correct way

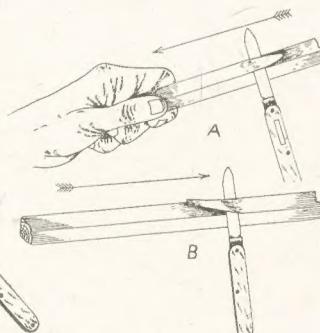


Fig. 2—Cutting a stick

of using a pocket knife is indicated in Fig. 2. This shows the knife being used to cut a stick of wood, and the method indicated at (A) should not be used. The knife is here again cutting towards the fingers of the hand holding the stick, in the direction of the arrow. Any slight slip of the blade will result in a cut finger or thumb.

When cutting a stick, use the method indicated in view Fig. 2 (B), which shows the knife blade cutting away from the hand holding the stick. A general rule for using the knife, is always to cut in a direction away from the hand which is holding the object to be cut.

There is another important point about the pocket knife, and that is the

question of sharpening it. There is no reason why you should not attempt to sharpen your pocket knife, but take a little care when doing so if good results are to be expected. Some people simply give the blade a rub on a piece of emery cloth, and wonder why the knife actually is in worse condition than before.

Sharpening

Always use a proper method for

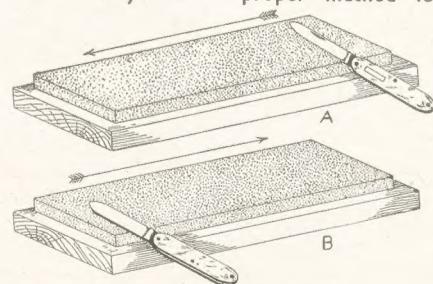


Fig. 3—Sharpening the blade

sharpening the knife, which is done in the following manner. A piece of oil-stone is best for getting a good edge on the knife. Smear a little oil on the surface of the stone, and with the blade slightly tilted, draw it over the stone from one end to the other, as indicated in Fig. 3 (A), in the direction of the arrow.

Turn the blade and push it over the stone in the reverse direction indicated by the arrow at (B). Repeat the operation several times, and then try the blade for cutting. After a little practice, you will soon become expert in sharpening your knife which will greatly add to the pleasure when using it.

Use the patterns on page 255 for making this MIDGET ELECTRIC LAMP

HERE is another novelty electric lamp, one that will catch the eye of the novelty maker. Such a lamp as this would be found most useful for the bedside table where a light is generally only needed for short duration and at perhaps long intervals.

Its attractiveness is brought about by the use of a moulded glass jar inverted and fixed in place on top of the box-like stand, this stand containing the four-volt double-cell battery. It is surprising what charming and brilliant effect can be obtained from these potted-meat and fish jars, and now they can be purchased in all shapes and sizes.

Jar for Globe

The jar illustrated here is 2½ins. high and 1½ins. in diameter at the largest part. The projecting rim top and its neck make it convenient in fixing as a globe or shade for a small electric lamp.

The overall dimensions of the battery just mentioned are height 3½ins., width 2½ins. and depth 1½ins., and these dimensions are of course carefully followed in determining the internal sizes of the lamp stand. Of course, the battery must not be a tight fit in the 'box', but space allowed for it to slide comfortably in place and to form contact with the wiring connections inside.

The Box

Proceeding with the stand or 'box', we first look at the sectional diagram Fig. 1. Note how the battery lies in the 'box', how it is held in place by two movable brass lugs, and how the contacts are arranged. The sides, ends and top of the box, and also the ornamental

box and then run the screw home, screwing it up tightly. This makes the switch contact 1 (Fig. 2) and seen in the wiring diagram at the top right of the pattern page.

The Wiring

Now take in hand the top of the box and make the four holes as indicated on the pattern sheet. The holes marked (O) and (H) are to take wires leading down into the box from the bakelite bulb holder. The wire (I), already mentioned as being fixed to the switch screw (J), will be brought up through hole (H) and connected to the bulb holder, see wiring diagram. The wire from (O) runs down inside and connects up with the screw which forms the fixing screw of the switch handle at (J).

A fairly large hole must be made next in the front of the box at (J), and after the shaped feet pieces (D) and (E) are glued on here, a hole must be made in them exactly opposite the hole already mentioned and made in the front at (J).

Switch Handle

Later on, when the side foot pieces are glued on, a round-head screw about $\frac{1}{2}$ in. or so long will be run in, round which again a short loop of flex is bound and allowed to project into the box to make contact with the side brass plate on the battery at (K), Fig. 1. The switch handle (N) on the pattern sheet will be put over the screw (J) at the same time the wire is threaded through at this place.

In arranging the various wires inside the box, keep them close to the surface, and it must be borne in mind also to use either cotton-covered or japanned wire

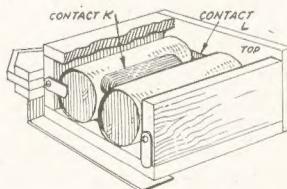


Fig. 1—Batteries in box

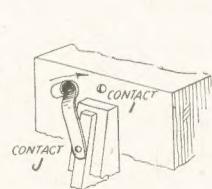


Fig. 2—The switch



Fig. 3—Globe fixing

projecting pieces on all four sides, are cut from $\frac{1}{4}$ in. wood.

A useful sheet of patterns is on page 255 of this issue, and all the above-mentioned parts are shown full size. Prick off each outline on to the wood, taking into account the direction of the grain for each particular part. Join up the points with a strong firm pencil line. Make two sides, two ends, one top and four of outline (D) and eight of outline (E).

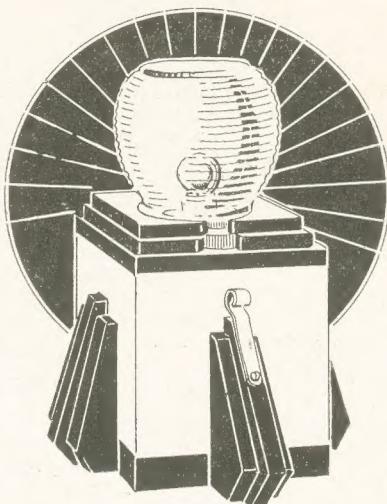
In one of the sides (A) bore a hole where it says 'screw' I' and run in a $\frac{1}{4}$ in. round-head screw. Previous to actually putting the screw into the hole however, loop round it a piece of cotton covered brass or copper wire and pass this through the hole into the inside of the

for insulation. Sufficient clearance must be allowed inside the box for the passage of the battery.

Feet Pieces

At (M) on the pattern sheet the outline of the lugs and method of fixing them are shown, their position at the base of the box being given at Fig. 1. These should work stiffly about the screws and so hold the battery securely in place. Each of the side feet consist of two pieces (E) with one piece (D) between them. See the back straight edges are uniformly flat and lie evenly to the box surfaces indicated by the dotted lines on the patterns.

The shaped pieces (F) and (G) are to



hold the glass globe in place, and two of each piece must be cut, (F) being $\frac{1}{8}$ in. thick and (G) $\frac{1}{16}$ in. thick. Trace and transfer the patterns from the sheet on to the wood, or, again, use the patterns for sticking down direct to the wood. When cleaned and ready for fixing to the top of the box, get the glass globe, stand it centrally over the bakelite holder, and mark round the brim in pencil.

Fitting the Globe

Now take pieces (F) and glue them to the box up to the pencil lines and after just gluing them, and before the glue has set, stand the globe between them for a perfect fit. Finally, put the globe in place again and put on each side of it the pieces (G) close up to the necking of the globe. Allow just a little movement as clearance, then run in the fixing screws, but do not add glue as, should the glass globe become broken, it can easily be removed and replaced.

Round the base of the box can be glued thin pieces of wood about $\frac{1}{8}$ in. wide to fill in the gap at the bottom if desired. In Fig. 1 part only of these strips is shown.

It will be understood that in Fig. 3 a broken section only of the glass globe is given with two pieces (F) shown fixed and one piece (G) on the extreme top. The woodwork can all be painted up artistically in art shades of paint or enamel.

(209)

**A Special Large Design
next week for making
a realistic model
Diesel Tractor**

Add to your enjoyment this summer with HOLIDAY SEA FISHING

THE popular holiday period of summer is a good time for sea-fishing. Indeed, one could not choose a better month than August, when many fish come inshore, so the holiday-maker may catch them by angling either from the pier or from rocks or a boat.

A seaside holiday is more attractive if one takes a rod and some sea-fishing gear among the luggage. Marine fish are game and hard-fighting—you seldom get a blank day. They are of diverse species, and most can be fished for with rod and line.

Even if the hire of a boat and the services of a skilled boatman are too expensive, you can find plenty of sport fishing from the rocks or beach-fishing that is free to all. Also remember that from a quay wall, a harbour, or even a pleasure pier you may catch good fish and so add to your holiday joys.

Rock Fishing

Fishing from rocks is interesting. For this kind of sea-angling you can manage with your ordinary bottom-fishing rod. But you must be prepared for some hard going when scrambling over the rocks to reach the best stances. In some places, as Filey Brigg, in Yorkshire, good fun is enjoyed casting a fly for billet (coalfish), from the rocky ledges.

Fishing from the shore for bass is attractive. These grand sporty fish will come close in, and you need not be a specialist in long-distance casting. You can manage very well with an ordinary sea-rod and a wood reel of the Nottingham pattern. The best kind of line for the holiday-angler is of braided green flax with a breaking strain of 30lbs., and about 50yds. long. The lure is either an artificial spoon or a spinner tackle baited with a piece of fresh mackerel.

From the Pier

Pier fishing is, perhaps, the most popular form of sea-angling with the casual visitor, down for his annual fortnight. It is easy compared with rock or surf-fishing. It is handier, too, and saves a lot of effort in getting away to suitable spots at a distance.

Besides flat-fish, you may from the pier catch mackerel, whiting, codling, pollack, and conger, as well as various others. For pier-fishing a suitable outfit consists of a rod 8 to 10ft. in length with a 5in. reel carrying 80yds. of line. A useful tackle is the paternoster, with a lead at one end, and two hooks fastened at right angles to the trace, the lower hook being about 9ins. above the lead. 1ft. or so above this is the other hook. Do not have more than two hooks on your paternoster, as more hooks may only foul the weeds, etc., when you catch a fish.

The lead should be of the Grip

pattern when fishing on a sandy bottom, and of the Pyramid shape for a stony or rocky bed.

On the Hook

The hooks baited, the tackle should be lowered into the water, and when the lead touches bottom the line must be held tight. A jerk at the rod-top denotes a 'bite'. You can detect these easily enough by holding the line between the fingers of your left hand. On getting a tug, strike sharply, and play the hooked fish carefully, keeping your line taut all the time.

When angling from a high pier stronger tackle is needed, as you will have to lift your catch up a good way, and unless the tackle is strong a heavy fish might well break free. But it is always advisable to use as fine a tackle as you dare risk. Sea-fish can be shy! As to baits for pier-fishing, you may try such usual ones as ragworm, lugworm, sand-eel, mussel, shrimps, and strips of fish.

Another method of angling from a pier is to use sliding float tackle, if the water is fairly shallow.

Paternostering

When paternostering from a pier it is necessary to be able to cast out your baited hooks 20 to 30yds. from the side or the pier-head. Practice will help. One method of casting is to draw off from the reel a quantity of line, with the lead hanging about 10ft. from the top of your rod; swing it out, and immediately the tackle touches water, let out more of the line, so that it is not dragged back, and the advantage of distance lost.

Some fish take almost any bait. For flat fishes, crabs without their shells and crushed soft are good bait; so, too, are strips of fresh herring. The latter bait also accounts for bass, conger, and whiting.

Suitable Bait

Ragworms are excellent baits for flounders and for nearly all kinds of sea-fish likely to come the way of the pier-fisher. You can buy them from the bait-merchants. Ragworms keep fresh in wet seaweed. Lugworms are also excellent baits for ground-feeding fish. But they are rather messy and unpleasant owing to the yellowish fluid they exude when handled. They attract whiting, pout and other sea-fish. If you cannot get 'rags' or 'lugs' try lobworms.

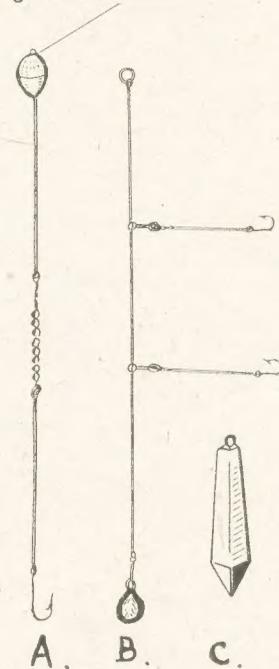
Sand-eels are good baits, and, perhaps, more suitable for such methods as trailing or spinning for bass, pollack, and mackerel; but they can be cut up for use as bait for the ground-feeding fish likely to be caught from the pier.

Pollack and Coalfish

No sea-fish is better known around our coasts than the coal-fish, alias saithe, billet, puddler, sillock, coalsey,

rock salmon, cuddie, etc. Coalfish attain a good size, the average being around 2lbs. to 3lbs. These fish are found in estuaries, on rocky coasts and headlands, also in sea locks. But they are also met with around piers, quays, and jetties, so that the holiday-fisher has a chance of getting them.

Fly-fishing with a white 'fly' made of gull feathers tied on an eyed hook is good fun. It can be practised from piers or rocks. Another method is spinning with an artificial sand-eel. Those who go afloat can try such methods as railing or whiffing, using ragworms and lugworms for bait.



Two-hook paternoster (B) a float tackle (A) and a pyramid lead (C)

Pollack much resemble coalfish in habits, and both fishes favour similar haunts. The bigger catches of pollack are made from a boat, though at times and in the right spots the shore-fisher also does well. Pollack are often taken by the method known as whiffing.

At Filey Brigg, Yorkshire, pollack are caught off the brig, and lots of mackerel, too, are taken by summer holiday anglers on the fly. Calm water is essential for the best results. There is plenty of scope for the sea-fisher round our coasts, for at most places there is fishing of some kind available.

Fishermen are naturally friendly people and you will soon find plenty to give you helpful advice. If you make enquiries before you go on holiday, there are probably fishers in your own town who will be pleased to tell you about the place you are visiting.

Alternative styles for two modern NEWSPAPER STANDS

HERE are two designs for Newspaper or Magazine Stands, from which to make a choice. The homeworker, and especially the ardent fretworker, should surely welcome one of these designs to build for his home or as a gift for a birthday or perhaps as a very appropriate wedding gift.

There is a similarity in the two designs, although the character of the fretted parts are dissimilar. The size overall of the stands is, length 16ins., height 18ins. and width 8ins.

The illustrations in Fig. 1 give a good idea of the stands, and we will first describe that shown as (A). The two ends are of $\frac{1}{2}$ in. wood, and their outline can be drawn from the detail, Fig. 2. A plain oblong of wood is first cut measuring 18ins. by 8ins., and a centre line should first be drawn down its centre as shown.

Marking Out

On this line place the centre point for describing the arc for the curved top 6 $\frac{1}{2}$ ins. down. Then, on one side of the centre line set in the 1in. squares shown at the lower end and the top end of the oblong on the right. Through these carefully follow the curves to get the correct shaping of the foot of the stand, its heart-shape fret and the hand hold above.

When this is done, make a paper tracing of the outline and transfer it to the other side of the centre line by means of carbon paper. It would be as well if this drawing and outlining were done on paper first, so a permanent record for future use could be kept.

When the one end has been cut and cleaned up it should be laid on the board prepared for the other end of the stand.

With a sharp-pointed pencil draw all round the outline and the cut-out 'heart', and see that the finished line is distinct for cutting with the fretsaw.

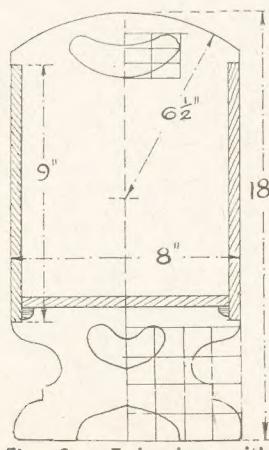


Fig. 2 — End view with dimensions

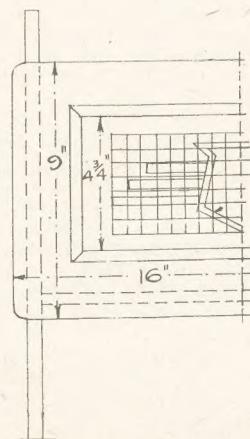


Fig. 3 — Half front and end

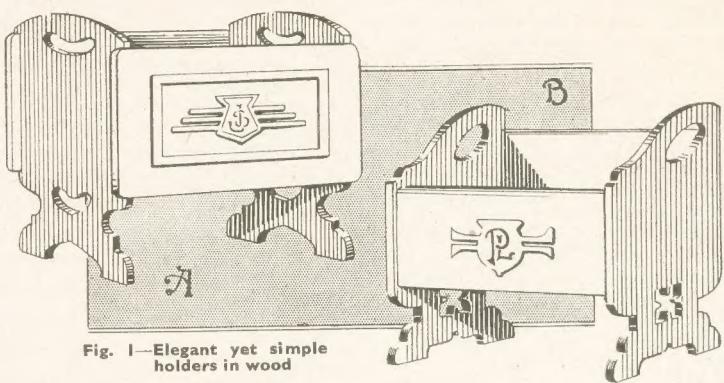


Fig. 1 — Elegant yet simple holders in wood

The sides of the stand (see Fig. 2) are recessed into the upright edges of the ends. The sides are shown shaded in the diagram, and are let in $\frac{1}{2}$ in.—the full thickness and the width of the sides.

In Fig. 3 the half of one side is shown. It measures 16ins. by 9ins. and is, of course, $\frac{1}{2}$ in. thick. Cut the two carefully and round off the four corners and clean up. At a distance of $\frac{1}{2}$ in. from the extreme ends of the panels make two countersunk holes and then screw them in, covering the heads of the screws afterwards with a filling composed of glue and sawdust mixed and levelled off.

A simple decorative panel may be added to one or both sides of the stand, as shown. The frame may consist of $\frac{1}{2}$ in. thick strips $\frac{1}{2}$ in. wide, mitred, glued and pinned on, while the interior fretted shield can be outlined and enlarged from the $\frac{1}{2}$ in. squared panel inside.

Floor and Support

For the floor of the stand a piece of $\frac{1}{2}$ in. wood measuring 14ins. by 7 $\frac{1}{2}$ ins. will be required. This is glued and screwed to the sides $\frac{1}{2}$ in. upwards from the lower edges of the side panels as seen in Fig. 3 by the dotted lines. The

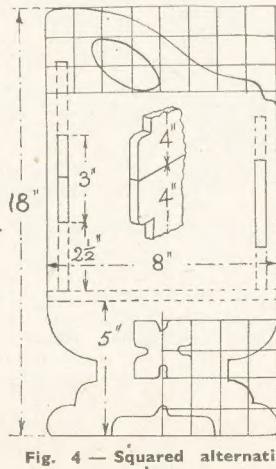


Fig. 4 — Squared alternative shape

heads of the screws will be filled as before suggested.

Underneath the floor, and in the angle with the sides, two strips of quarter-round or plain square beading should be glued to form additional strength to the stand.

Alternative Designs

The second Stand (B, in Fig. 1), is very much like the foregoing and therefore needs but very little explanation. The overall size of this stand is the same but the feet are of slightly different outline as is the tops of the ends. Two boards 18ins. by 8ins. will again be cut, and a number of 1in. squares lined in in two places as shown in Fig. 4.

The same method is adopted for the shaping and interior frets as previously explained. The back of this stand is higher than the front and is best made therefore in two widths of boards glued together. Two boards, each 16ins. long and 4ins. wide, are glued, jointed and tenoned. Then cut one at each end 1in. wide, as the inset detail shows in Fig. 4.

Care must be taken to set out the mortises correctly 3ins. long and $\frac{1}{2}$ in. wide for both the back and front panels as shown. Set out the position of the floor on each finished end of the stand before these mortises are drawn in; see measurements in Fig. 4.

The front board will be as Fig. 5 shows, portion only being given in conjunction with the end upright and the tenon. The floor measures 14ins. long by 8ins. wide by $\frac{1}{2}$ in. thick and is glued and screwed to the lower edges of the front and back panels. Screws could also be put through the ends into the floor if desired.

Make the whole construction strong to provide an attractive article.

The kitchen ceiling can be made to accommodate A CLOTHES AIRER

ACLOTHES airer for hanging in the kitchen is a boon to any housewife, particularly if a baby's nappies have to be dealt with. Making one is a very simple carpentry job, but remember that during the winter the airer may have to be used for drying clothes, and a full load of wet clothes is quite heavy.

The method of rigging is, therefore, very important, if the appliance is to be used without difficulty, and to do it properly the rope should be carefully knotted and spliced. Splicing is quite easy and the art is well worth knowing as it often comes in useful. A little practice is advisable, however, before tackling the airer.

A Useful Size

The actual size of the airer is a matter of choice. In the writer's own case it was made as big as could conveniently be used in the kitchenette. This was 8ft. in length and 1ft. 9½ins. in width to take five bars. If you consider three or four bars sufficient, the width can be reduced but the distance between bars should not be less than 4ins.

The end pieces (Fig. 1) are made of 6ins. by ½in. board or plywood as per drawing, and 1in. by ½in. laths for the rails. When planing these, remember to remove the sharp corners. A ½in. carpenter's bit is required for drilling the holes in the end pieces—one in each upper corner for the ropes and two close together for each rail.

The latter are cleaned out with a chisel afterwards to make each rail a sliding fit and then a wire nail is driven into each joint at an angle to make the whole thing rigid. The rails extend 6ins. beyond the end pieces and provide useful hanging space for small items.

A single and a double pulley block for

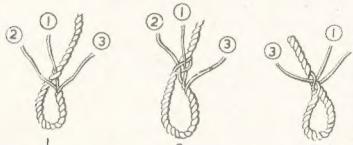


Fig. 2—Stages of making the eye splice

the ceiling can be purchased from an ironmonger, together with a cleat for the wall. The blocks must be screwed into a joist in the ceiling and this can be found by tapping the ceiling lightly. The parts which do not sound hollow should be the joists but to be quite sure probe gently with a sharp pricker and make sure you are going into solid timber.

The screws on the pulleys are long and a hole must be drilled into the joist to give them a start. If, with all this, you mark the ceiling, you can fill the dents later with a little Keene's cement.

The wall cleat should be secured in a position suitable for whoever is going to

use it most. 5ft. from the floor is usually satisfactory. If it has to be secured some distance away from the airer, another double pulley block may be required in the ceiling near the wall to keep the rope clear.

Good quality rope is essential to withstand constant wear on the pulleys and ¼in to 1in. circumference is recom-

acher up as high as it will go, secure it and then cut the rope 6ins. below the mark. Unlay the ends as far as the piece of string and splice them into the other rope.

Although this is not an eye, the same kind of splice is used and when completed the two ropes are said to be married. Make sure that both ropes are taut and

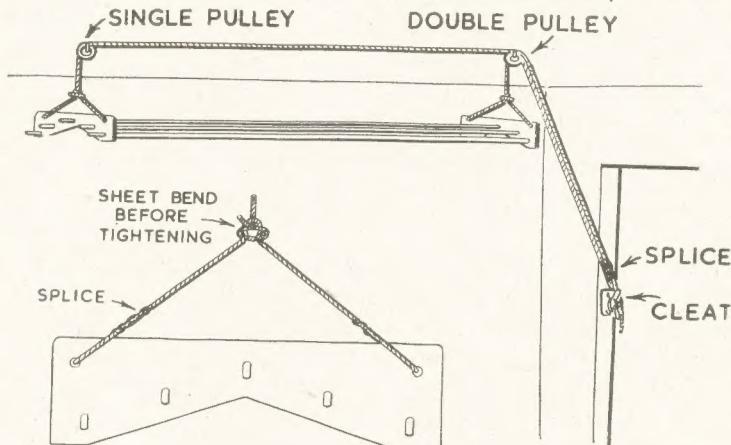


Fig. 1—A detail of shape of one end piece

mended. About 30ft. should be sufficient for an ordinary kitchen.

Now the airer is constructed and the pulley blocks and cleat are in position we can consider the rigging. Cut off two 3ft. 6in. lengths of rope for the end pieces and pass one end of each 9ins. through the holes provided. Next unlay the strands 6ins. at each end and make four eye splices as described below and as shown in the sketches.

The ends of the remainder of the rope have to go through the pulleys and they should be bound tightly with string first. This can be left on and will avoid the ends of the rope becoming frayed and unsightly later on. Reeve one end through the double pulley and then the single pulley and down to the floor. The other end goes through the double pulley only.

These ends are secured to the ropes on the airer by means of a sheet bend as shown in the drawing at Fig. 1. Form a loop in the exact centre of the rope on the airer, pass the end of the main rope through, round the back and then under itself at the front before pulling tight.

The Right Height

When the two ends of the main rope are secured, the airer can be hauled up and down to make sure it is working properly. The final step then is to secure the airer at the exact height the user would like to have it for normal use when hanging clothes. A distance of 3ft. 6ins. from the floor is a convenient height for most people. Now mark one of the ropes close to the double pulley by tying a piece of string tightly round it. Pull the

the airer level before commencing the splice.

When the splice is finished the airer can be lowered until the splice reaches the double pulley when it will be supported at the convenient height previously mentioned without any danger of slipping. There is no need to secure the rope to the cleat while loading the airer. Hauling up is done by means of one rope instead of two, and the airer must remain level.

An Eye Splice

Unlay the end of the rope at least 6ins. and after forming the size of eye required lay the three strands on the main part of the rope. Now tuck the centre strand under the strand nearest to it, as shown in Fig. 2. Pull through gently until strand No. 2 is snug against the rope. Next pass No. 2 over the strand which No. 1 went under and tuck it under the next, as in the detail No. 2 at Fig. 2. Finally, turn the rope over and tuck strand No. 3 under the third strand of the rope, as in No. 3.

This completes the first tuck and the splice is continued for 3½ tucks by tucking each strand over and under a strand of the rope twice more, plus the half tuck which is made by splitting each strand down the middle and tucking only half. Cut all ends off close to the rope and the splice is finished.

It is usually possible to lift the strands for tucking under by untwisting the rope between the fingers, but if this proves difficult a pricker or small spike can be used.

Some practical hints by an expert about PHOTOGRAPHY IN JULY

We have often wished it possible to collect a large crowd of holiday makers in a hall, the only terms of admission being that each should show a camera on passing the barrier. The main theme of the lecture would be something on the lines of Fifty Years Experience of Camera Work, What to Take and Errors to Avoid.

Such a meeting is not possible but as an alternative we can reach the amateur Photographers who are regular readers of *Hobbies Weekly* and as this is one of the holiday months, there is no reason why that so-called Lecture should not be put into print for their benefit and so prevent some disappointments.

Camera Groups

The talk must start with a note of warning concerning two very common errors responsible for a considerable number of spoiled films every season. It would, however, be very wrong to blame the photographer for all these. It has been the author's privilege to spend a great number of holidays with groups of people made up of a majority of camera users and this experience compels one to admit that the blame is due to other influences which are difficult to combat until the trouble has been clearly demonstrated.

Everyone of us is at times struck with the beautiful colours with which nature paints our English scenery. And as

objects of general interest to compensate the loss of colours when a black and white print is the only result? Is the composition or make-up of the view correct?

If your consideration of the subject on these lines fails to give you a satisfactory conclusion, then you will be wise to pass by and look for something else.

It is not generally realised what a tremendous influence colour has on our senses and although we have mentioned this experience before, yet it is worth repeating as illustrating what we are anxious to bring home to everyone.

Some few years ago while staying in the West of Scotland we were favoured one evening with a most gorgeous sunset, something which surpassed any previously seen by the guests of the party. Within a few minutes cameras were clicking everywhere and probably the number of exposures exceeded three or even four dozen.

Yet not one of them was any good! For two very obvious reasons; first the whole colouring of the scene ranged from orange to deep red, which are the lights in use in our darkrooms and are non-actinic; the second reason, that the light value at sunset is never powerful enough for snapshotting and most certainly on this occasion was hopeless.

Those amateurs really were not to blame. They were enthusiastic and wanted to take back something to remember the occasion. They could not help admiring the spectacle and its power affected and certainly influenced their better judgment. Undoubtedly, they had a keen disappointment.

Judging Distance

The second of the common errors relates to the taking of long distance views. In our rambles, hikes or coach trips we frequently stop to admire the view from the top of a hill. A glorious panorama is stretched out below and before us and our eyes can wander over ten or even twenty miles of almost uninterrupted country. The same experience applies to those of us who have enjoyed the pleasure of climbing a mountain. Here a change of this type of

scenery is constantly presenting itself, and if a camera is being carried, the thought is turned over as to whether to make an exposure or not.

Well, it is good to have the thought because we know that in the great majority of instances the decision will be to 'pass on'. But if you feel you would have a successful print then, of course, there is no reason to stop you taking.



A typical and topical beach subject

Realise, however, that you are trying to transfer a view with dimensions extending over many square miles to a small piece of film about 3½ins. by 2½ins.

It can only be satisfactory if you can place yourself in a position to ensure some prominent details or objects are included in the foreground and middle distance and thus using the extensive part of the view as a background to the picture. Without these details the result often appears as a collection of dots and dashes or conveys a very poor idea of a grand but huge landscape.

Colour Effect

We hope these warnings will be found helpful. It is not the intention to prevent you admiring nature's colourings, but to warn you not to be unduly influenced by them. We shall in due course have the beautiful autumnal tints and a spot of sunshine on these makes a great deal of difference, enabling many charming and really pictorial results to be achieved. The various shades of greens and browns help to produce tone values or gradations in the negative and print. Let us also remind you that you will probably find more satisfaction in taking small pieces of landscape than attempting the large and extensive views, beautiful though they be.

This last note seems to suggest that so far this article is largely composed of matter of a negative character and it is time that you were given something rather more positive and of help to you in selecting your 'bag' of holiday mementoes.

Holiday Snaps

What a lot this expression implies.



A pleasing wave study

amateur photographers are always on the look-out for the beautiful, we naturally, are influenced to probably a greater extent than the non-photographer. It is, therefore, not surprising that we fall into the trap and make an exposure when, if we would only stop for a few seconds and try to imagine how that particular scene would look in 'black and white' we should certainly not take it.

Where colour dominates the scene there are one or two questions which must receive satisfactory answers before taking the decision to shoot or not to shoot. Will those colours influence the time of exposure? Are there any

Even the word holiday recalls our memory but when 'Snaps' is added; well, we automatically dive for our pocket wallet to bring out that little batch of prints. Or, perhaps, you are much more methodical (we hope you are) and have got the prints nicely mounted in an album, with details under each. And possibly a record of the visit and circumstances relating to that day's excursion to an historic and interesting village close to where you were staying.

Some few weeks ago our interest received a very pleasant fillip. It was while going through a number of photographs, all very good technically. But there was one which, partly because of its originality but more from its historical interest, attracted attention and caused questions to be asked about it.

It was a print of a 'House Sign' the sort of illustrated name sign usually applied to public houses and village inns. This particular one did not belong to either, but was in the nature of a 'Trade-mark' of an old established firm in the City of London.

House Signs

Now we have all from time to time come across very interesting signs, some of which are interesting because of their excellent painting, their history or even because the name or picture is unique. Many large banking and insurance companies have their own particular signs and, again, many manufacturing firms throughout the country go to much expense in designing and producing specimens of their trade marks. So that when the 'locals' are included in this field of opportunities, it becomes very extensive and it seems to me that it offers something new for the amateur photographer.

Collections of Interest

It is curious how almost everyone is keen on collecting something or other, stamps, coins, snuff boxes, etc., etc. The collection of match box labels is a hobby that seems to be growing and surely if match box labels are worth collecting, then there must be much more value in collecting and exchanging photographs of Hotel, Public House, Village and other forms of Signs which occupy conspicuous places. In many instances, they are of public interest as representing and indicating direction points, bus stops, etc.

It is just possible that some of you might be asking what value such a collection might have. The answer is that, apart from the personal interest, it gains actual value as it gets older, because it is surprising how quickly places change, in these days old village inns become Country Clubs or palatial Road Houses in the twinkling of an eye; streets are widened to meet traffic needs and anything ancient becomes modern.

An Annual 'Best'

Having given you an idea for keeping a watch on small objects for a collection, consider quite a different type of work

with your camera and to start this year. During the holiday set your mind on getting at least one 'Best Picture of the Year'. Be extra careful in selecting and be sure it is pictorial. Put all you know about exposure, lighting and composition into the taking, and when the time comes for developing and printing, be on your toes to continue the same care.

Mounted Enlargement

If you are satisfied with the result and can make an enlargement, do so, or have one made. Mount this in good style, and on the back of the mount write the details, including the date it was taken.

If you do not wish to frame it, then make yourself a portfolio in which to store it with others as they come along each year.

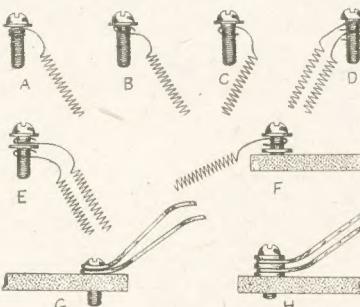
Improving Results

You will be surprisingly pleased and should be proud of the collection as it grows. The actual effect of this work will be seen in the improvement and general progress which it forces upon you. For, if it is your best effort, then it will be better than anything previously achieved by you, so your photography will be more successful with fewer failures.

The proper care in electrical spiral element TERMINAL CONNECTIONS

READERS who undertake the work of renewing a spiral element in an electric fire or boiling ring, should take particular care in making connection to the terminals. A badly-made terminal connection can cause much trouble, since any slight ill fit can result in arcing with a burn out at the connection.

One common cause of trouble is indicated in view (A) of the accompany-



ing illustrations. Here the end of the element is twisted round the terminal screw, with the result that when screwed down on the terminal bar the threads tend to cut or nick the element, with a resulting arc and burn out when current is switched on.

A Better Method

A better method of making the connection is indicated in (B) where the element is loosely looped round the screw under the washer in a clockwise direction. Making the connection in this way will tend to avoid nicking the element and thus prolonging its life.

If the element is looped in an anti-clockwise direction as indicated at (C) trouble may result in the end turning away under the washer when tightening the screw; so it is better to loop as at (B).

In the case of three heat control boiling ring elements, the ends of the two spirals which are connected to the common neutral bar should be given careful attention. One common method is to loop the ends together under the screw head, as indicated in view (D). This method has the disadvantage of causing the ends to spread out when the screw is driven home.

Washer Separation

A much better method is indicated at (E) where it will be seen the ends are separated by washers which prevent the ends of the element from spreading. When making connection to the terminal plate there are one or two points well worth considering. When an element burns at the contact point of the terminal plate, the arc thus formed is so intensely hot that it burns the surface of the bar. Any roughness of the bar should be smoothed off with a file before refixing the end of a new element.

In order to obtain a good seating for the element, loop the end between two washers before screwing down to the bar, as indicated in view (F). The same rules should be observed when making new connections of the current conductors in electric fires. Use a washer under the screw head, and remember to loop the end of the conductor round the screw in a clock-wise direction.

Mistakes to Avoid

Avoid the mistake in connecting two common conductors to the terminal bar, as indicated in view (G). It will be seen that in the absence of washers, the loops have spread, which allows the head of the screw to pass through without obtaining tight contact. A good contact is obtained by using three washers as clearly indicated in view (H), which will assure a sound connection.

(173)

Further instructions on how to erect a practical HOME-MADE GARAGE

LAST week we gave complete cutting list of material and the first stages for building this strong and economical piece of work. Now we can continue.

The nails used should be $1\frac{1}{2}$ ins. round, and they should be spaced approximately 6ins. apart. The side will now be covered with the exception of the strip above the window frame; this can be covered later with strips left over from the roof.

Covering the Rear Section

Lay the rear section on the floor and place in position the two 6ft. by 3ft. sheets, one each side of the doorway. Take up 6ft. by 4ft. sheet and place on two trestles or tea boxes of equal height. Mark off and saw the piece into two equal pieces 4ft. by 3ft. It is a good plan to saw 2ins. or 3ins. from one side then start at the other side and saw right through. This will avoid breaking the corner off when finishing. Take one of these pieces and draw a pencil line across the diagonal.

Now try the sheet in position, see Fig. 13. If the frame has been built correctly, there will be a strip of asbestos about $\frac{1}{2}$ in. to spare. If necessary, mark to fit the frame and carefully saw. The piece left over should be sawn to fit the opposite triangular space. With the four pieces in position mark out and drill for nails. While the section is still on the floor, after the asbestos has been nailed in position, drill the four $\frac{1}{2}$ in.

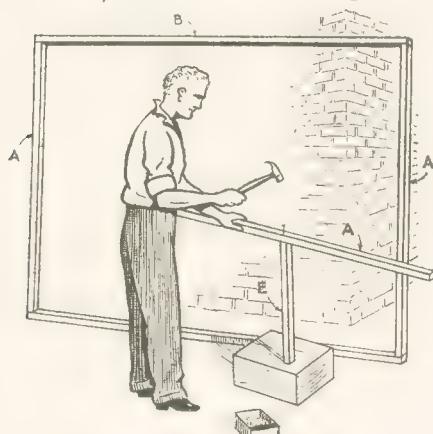


Fig. 10—First stage assembly rear section

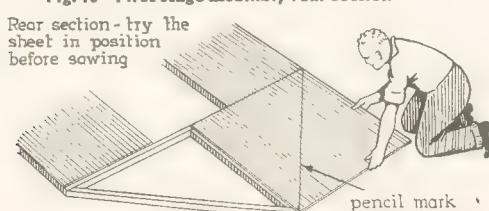


Fig. 13—Fitting the asbestos sheeting

holes to take the $\frac{1}{2}$ in. bolts which are to hold the sections together.

It is important that the holes in each section are drilled to a convenient set dimension, noting that the front section bottom rail lies 2ins. lower than those of the other sections when assembled. This is to give a clear run in, the front section bottom rail being sunk in the floor.

Covering the Roof Sections

The four roof sections are identical in size and so is the covering, but care must be taken when fixing due to the overhang. The first thing to do is to saw the sheets ready for fitting. It should be noted that although the roof frames are 4ft. 9ins. long, the asbestos is sawn 5ft. This gives a 3in. overhang which is just right for the 3in. guttering, after allowing for the thickness of roof board and the gutter bracket.

Each of the four sections will require one sheet 5ft. by 4ft. and one sheet 5ft. by 3ft. This means that a 12in. strip will have to be cut from four sheets of 6ft. by 4ft. and from four sheets 6ft. by 3ft. Take each sheet in turn and support it on trestles, and saw off the spare strips, taking care not to break them, as they will be wanted later.

Asbestos Sections

As already mentioned, care must be taken when fixing the asbestos, the four sections must form a set. To make sure that everything is right, lay the four sections out on the floor just as they will

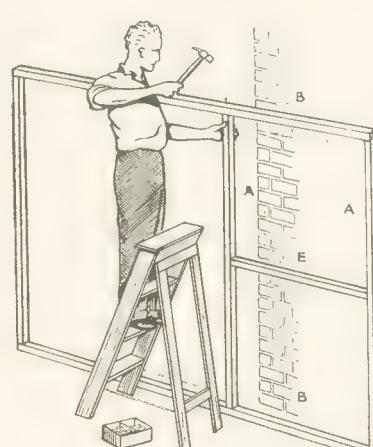


Fig. 11—Second stage rear section

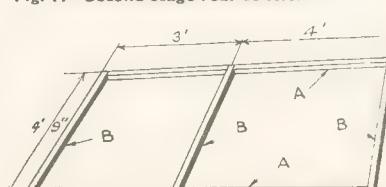


Fig. 12—Assembly of roof frame

fit when in position on the roof. This means that the 3ft. and 4ft. spaces line up with those in the side sections. Next place the asbestos in position with the overhangs to the outside. The asbestos can then be marked out, drilled, and nailed in correct position.

Before drilling for the nails, it should be remembered that as the weather strips which cover the sheeting joints are only 2ins. wide, it is important that the nail heads come well under the strips to prevent wet entering down the nails. With this in view, nails should be placed not more than $\frac{1}{2}$ in. from the edges where the sheets meet. The nails used along the top and bottom of the sections should be special roof nails, having large flat heads, they should be galvanized, and 1in. to $1\frac{1}{2}$ ins. long.

Covering the Front Section

The front section being chiefly doors, requires very little asbestos for covering. The 4ft. by 3ft. piece left over from the rear section should be sawn down the diagonal after it has been tried in position on the frame. Fit the two triangular pieces in position, mark out and drill for the nails. Make secure, using $1\frac{1}{2}$ in. round nails. The pieces left over from the roof can be used to fill in the $7\frac{1}{2}$ in. spaces each side the door frame. If 3ft. strips are used these will make a

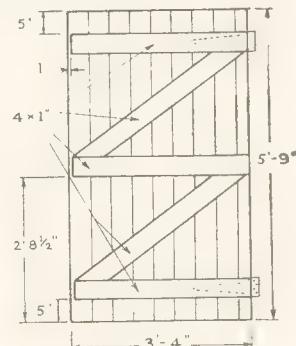


Fig. 14—The front door

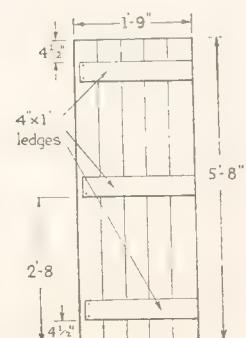


Fig. 15—The rear door

joint half way up the frame which can later be covered with weather stripping.

Finally, drill the four $\frac{1}{2}$ in. holes for the bolts which hold the sections together, drilling them to match the holes in the side sections and not forgetting that the bottom rail of the front section is 2ins. lower than the side sections.

Finishing the Side Sections

All that remains to finish covering, is

The front doors are made of 6in. tongued and grooved matching, 5ins. wide. Asbestos panel doors can be made, but these soon get cracked if caught out in a gale. The bracing pieces are 4in. by 1in. planed battens. The layout and dimensions are shown in Fig. 14. A 6ft. length of matching should be marked out for the rails or ledges. Nail the three ledges in position and

other matchings in position using two $1\frac{1}{2}$ in. oval nails in each end. The matchings should be held together with a clamp before nailing, or knocked together with a wooden block.

Trim the ends to give each door an overall length of 5ft. 9ins., making the bottom ledge 5ins. from the bottom of the door. Add two screws to each end of the last matching to prevent the boards

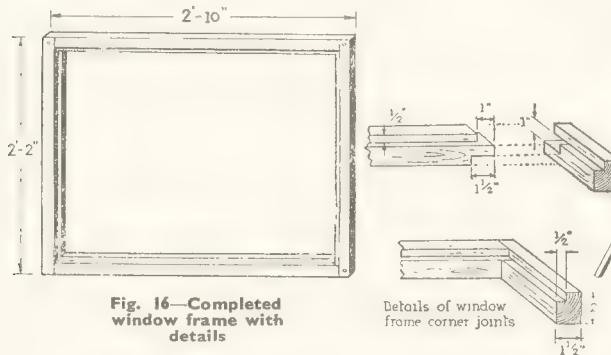


Fig. 16—Completed window frame with details



Fig. 17—The first stage in assembly and erection of the work

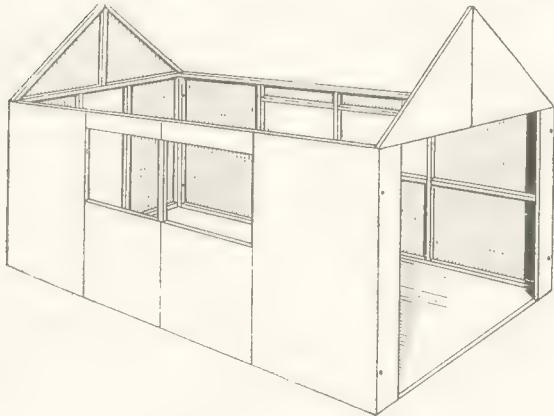


Fig. 18—The four sides assembled

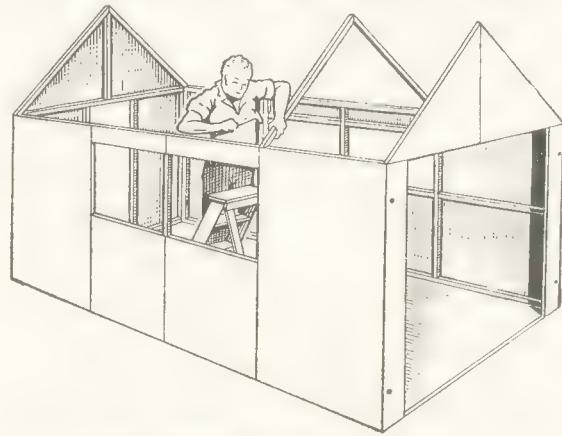


Fig. 19—Fixing the roof supports in place



Fig. 20—Screwing cross section supports

to finish the side sections by covering the spaces over the windows. Four pieces will be required for the two sides all 3ft. by $8\frac{1}{2}$ ins. These can be cut from the remaining strips left over from the roof. The asbestos covering is now complete and everything dealing with it can be cleared away.

perfectly square with the matching, using $1\frac{1}{2}$ in. nails (oval), two in each ledge.

When it is assured that the ledges are perfectly square, drill each ledge to take $1\frac{1}{2}$ in. screws. Fit the screws and pull them dead tight so there is no chance of the ledges getting out of square. Nail the

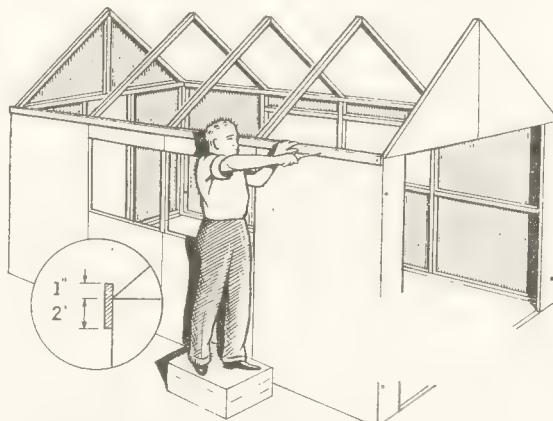


Fig. 21—The 14ft. boards fixed before the roof sections

opening when exposed to the weather. Place the bracing pieces in position and mark for sawing. The braces should be fitted to the doors to form a pair, that is in each case they should point down from the hinges.

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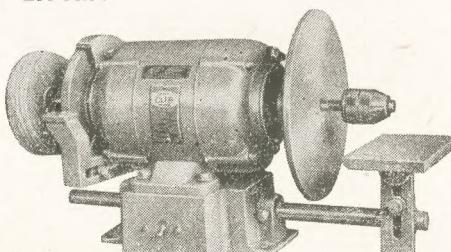


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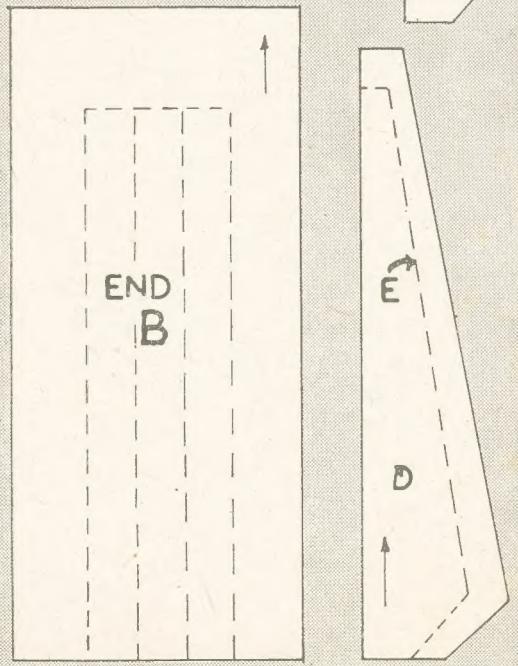
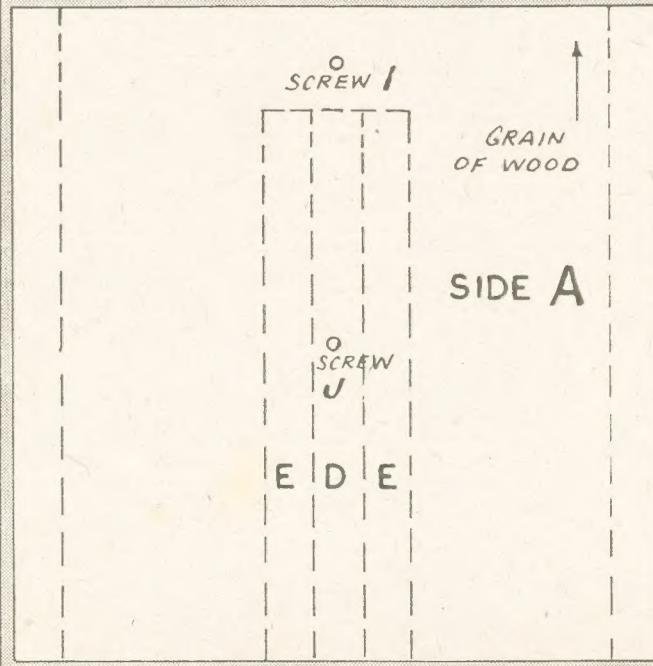
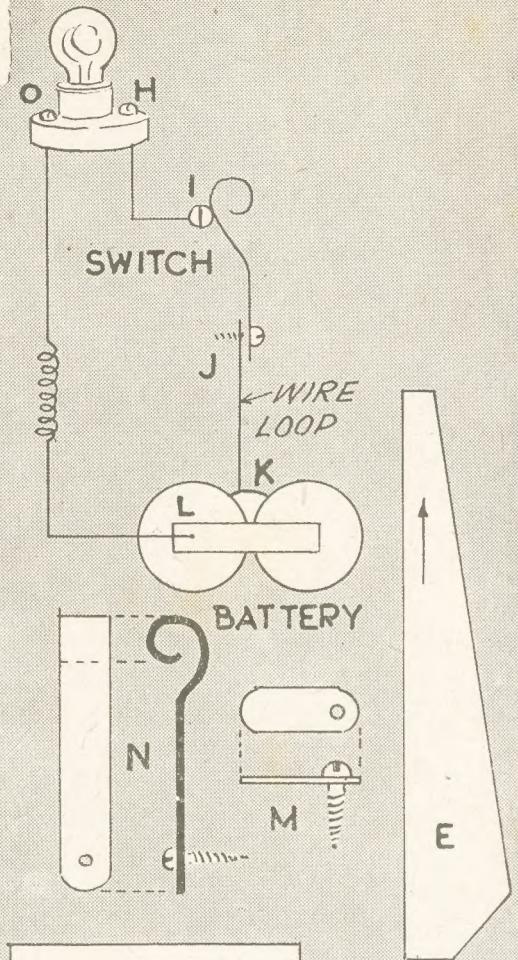
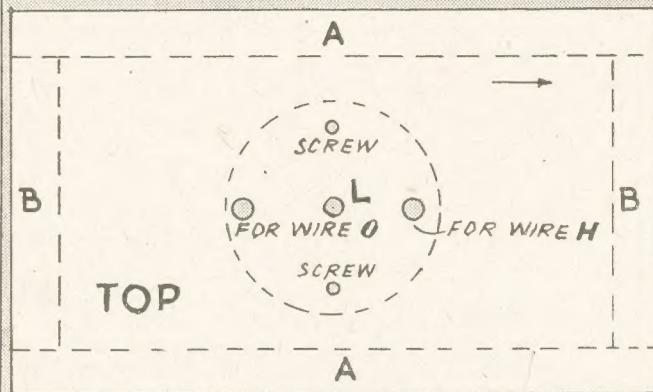
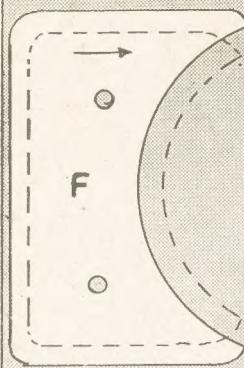
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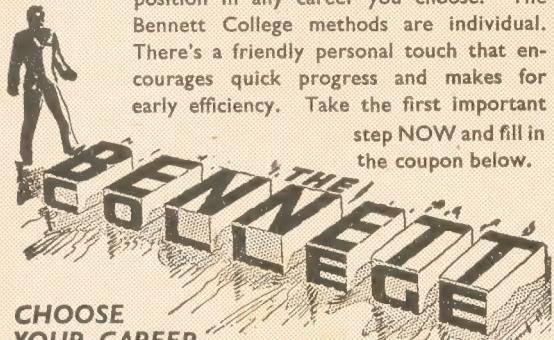
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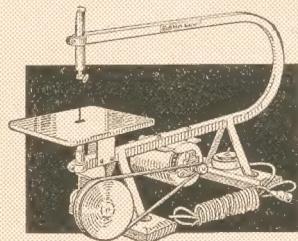
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